

Appl. No. 09/695,645
Amdt. dated August 31, 2006
Reply to Office Action of May 31, 2006

Remarks

The present amendment is filed in conjunction with the filing of an RCE and responds to the final Official Action dated May 31, 2006. The Official Action rejected claims 2, 3, and 12-24 under 35 U.S.C. § 112. Claims 1-6, 11-17, and 20-24 were rejected under 35 U.S.C. § 103(a) based on Krasner et al. U.S. Patent No. 6,298,098 (Krasner). Claims 7-10, 18, and 19 were rejected under 35 U.S.C. § 103(a) based on Krasner in view of the admitted prior art as applied to claims 1 and 12 and further if view of Tourtier et al. U.S. Patent No. 5,446,495 (Tourtier). These grounds of rejection are addressed below.

Claims 1, 2, 11-13, 18-20, and 22 have been amended to be more clear and distinct. Claims 25-28 have been added. Claims 1-28 are presently pending.

The Art Rejections

As addressed in greater detail below, Krasner and Tourtier do not support the Official Action's reading of them and the rejections based thereupon should be reconsidered and withdrawn. Further, the Applicant does not acquiesce in the analysis of Krasner and Tourtier made by the Official Action and respectfully traverses the Official Action's analysis underlying its rejections.

Krasner describes a headend demodulator for acquiring and synchronizing a data burst by detecting a special format preamble. Time division multiple access (TDMA) time slots at a given frequency are assigned to subscribers with gaps between transmissions. A burst demodulator processes the incoming signal arriving between gaps at the given frequency with

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each burst processed individually. Krasner, Fig. 2 and col. 2, lines 47-58. The individual processing of a data burst includes a filter/downconverter/decimator 32 as a single channel operational unit that provides a single baseband signal. Krasner, Figs. 3 and 4A and col. 3 lines 57-63. Krasner is silent concerning the structure and operation of the filter/downconverter/decimator 32 and is further silent about any adjustments that might be made to its operation.

In contrast to Krasner, the present invention operates on "two or more non-overlapping upstream channels, each upstream channel centered on a selected frequency within the upstream band of frequencies, wherein the selected frequencies are determined to avoid interference" as claimed in claim 1 as presently amended. Claim 1 further recites, "a down-converter configured to accept a data stream comprising samples of the upstream band of frequencies sampled at a rate of at least twice the frequency of the highest selected frequency in the band and utilizing the selected frequencies to convert each of the two or more non-overlapping channels within the upstream band of frequencies to baseband..." Krasner does not teach and does not make obvious a down-converter which is configured "utilizing the selected frequencies to convert each of the two or more non-overlapping channels within the upstream band of frequencies to baseband" as presently claimed in claim 1.

The Official Action suggests that it would have been obvious "to equip Krasner" to be "compliant with the DOCSIS standard". The applicant respectfully disagrees. DOCSIS provides no basis for correcting the above noted deficiencies of Krasner.

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Regarding claims 2, 3, 13, 14, and 20, the Official Action suggests that "It is well known in the art that a single baseband receiver as a multi-band operable receiver has multiple down-converters (Filter/Down Converter/Decimators, steps B1, C1, and C2) for assuring minimizing the mean time to intercept and maximizing the probability of intercept." Regarding claims 23 and 24, the Official Action further suggests that "it is well known in the art that the baseband frequencies of an information signal starts from zero frequency to the highest information frequency, hence the baseband center frequency of the baseband signal bandwidth is zero Hz." The applicant respectfully traverses both assertions, and does not acquiesce in the Official Action's analysis of the state of the art at the time of the invention.

Dependent claims 7-10, 18, and 19 were rejected under 35 U.S.C. § 103(a) based on Krasner in view of the admitted prior art as applied to claims 1 and 12 and further in view of Tourtier. The admitted prior art and Tourtier fail to cure the deficiencies of Krasner.

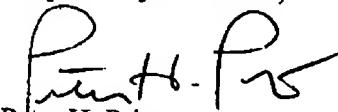
Since claims 2-11 and 23 and claims 13-22 and 24 depend from and contain all the limitations of claims 1 and 12, respectively, as presently amended, claims 2-11 and 13-24 distinguish from the references in the same manner as claims 1 and 12, placing claims 1-24 in order for allowance.

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Conclusion

All of the presently pending claims, as amended, appearing to define over the applied references, withdrawal of the present rejection and prompt allowance are requested.

Respectfully submitted,



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